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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/445,710	03/13/2000	HANNU JUHANI LEINO	32107	1287
116	7590	08/18/2004	EXAMINER	
PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200 CLEVELAND, OH 44114-3108			ALVO, MARC S	
			ART UNIT	PAPER NUMBER
			1731	

DATE MAILED: 08/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/445,710

Applicant(s)

LEINO ET AL

Examiner

Steve Alvo

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over ADMITTED PRIOR ART (specification, page 1, paragraphs 0002 and 0003) in view of OSTBERG with or without G.B. Patent 815,527 with or without EP 0 281 273.

The ADMITTED PRIOR ART teaches that acidic papermaking stock entering the stock preparation system and the short circulation is run at neutral the conventional way of raising and controlling the pH is to add sodium hydroxide to maintain the pH at a pH of 7.0-8.5. However, the ADMITTED PRIOR ART further teaches that it is difficult to perform the pH adjustment in a controlled way due to the low inherent buffering ability of the pulp suspension. OSTBERG teaches (page 515, first paragraph) that it is "important to have an even pH of the pulp to the paper machine" and teaches that the pH can be stabilized, e.g. an even pH, by adding carbon dioxide to the pulp after the alkali addition, so that the pulp is buffered at a pH of 8.0. It would have been obvious to stabilize the pH of the ADMITTED PRIOR ART by adding carbon dioxide to buffer the pulp in the manner taught by OSTBERG. See OSTBERG, page 512, second paragraph for treating bleached or unbleached sulphate pulp. See page 509, middle of page for "CO<sub>2</sub> gas" dissolved. If not obvious to use an aqueous solution of sodium hydroxide then such is taught by G.B. Patent 815,527. It would have been obvious to that the alkali of OSTBERG et al could have been an aqueous solution of sodium hydroxide as such is taught by G.B. Patent 815,527. G.B. Patent 815,527 further teaches that the sodium hydroxide could be added prior to the carbon dioxide (page 2, lines 35-41). Claim 9 is rejected as the use of pipes to

add chemicals is well known in the papermaking art, if not obvious then such addition is taught by EP 0 281 273. It would have been obvious to add the alkali and carbon dioxide of OSTBERG using pipes as taught by EP 0 281 273. If necessary it would have been obvious to add the carbon dioxide of OSTBERG into the short circulation, e.g. just prior to the paper machine, as such is taught by EP 0 281 273. Claims 14, 17, 19, 21 and 23 are rejected as the alkali of the ADMITTED PRIOR ART would obviously lower the consistency of the pulp as it dilutes the pulp. If this is not obvious then the use of white water to dilute higher consistency pulp is taught by EP 0 281 273 (white water (46) dilutes refined pulp (62)).

Applicants' arguments that OSTBERG et al adjusts the pH in the pulp mill and not in the stock preparation system is not convincing as the ADMITTED PRIOR ART teaches controlling the pH in the stock preparation and short circuit. OSTBERG et al teaches the importance of having an even pH "in the paper machine". The "paper machine" is part of the stock preparation system and not part of the pulp mill. Besides, the addition of carbon dioxide to control the pH in the short circuit is taught by EP 0 281 273. It would have been obvious to control the pH of the ADMITTED PRIOR ART and/or OSTBERG et al in the paper machine by adding carbon dioxide to the short circuit in the manner taught by EP 0 281 273.

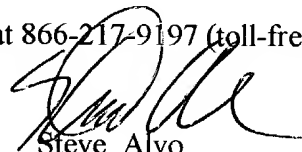
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Alvo whose telephone number is 571-272-1185. The examiner can normally be reached on 5:45 AM - 2:15 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Steve Alvo  
Primary Examiner  
Art Unit 1731

msa